

MEMORANDUM

State of Alaska

TO: Art Schmidt, Fishery Biologist
Sport Fish Division
Sitka

DATE: September 26, 1975

FILE NO:

TELEPHONE NO:

FROM: Donald L. Siedelman
Area Biologist
Sport Fish Division
Ketchikan

SUBJECT: Summit Lake

PRINCE OF WALES IS

Flew into Summit Lake on 9-17-75 and set a variable mesh gillnet. The net was set across the lake from the outlet near a small inlet stream. Surface water temperature was 54°F (12.2°C) at 1600 hours. The small creek was 47.5°F (8.6°C). The lower end of this creek could be used by arctic grayling for spawning. From the air there were no inlet streams other than this one that could be used for spawning. The stream from Marge Lake could have a little spawning area where it enters Summit Lake.

On the 18th at 0930, we picked the net up. Lake surface temperature was 52°F (11.1°C). Weather was CAVU and couldn't have been better (unusual for Ketchikan). The net had fished for 17.5 hours catching 15 arctic grayling. The attached sheet fairly well summarizes the information obtained from the samples.

There were two age groups - age 2 and 3. Lengths ranged from 179-300 mm, averaging 257 mm. Most of the fish collected would spawn this next spring. Some had spawned this spring. The catch/unit of effort was the highest for all grayling lakes sampled so far.

If these fish are not reproducing in this lake then they would be dropping out of Marge Lake and also from Summit Lake into Mellen Lake. Fish can be taken in all three lakes.

Stomach samples indicated the fish were feeding actively with the most prevalent item being freshwater shrimp. Following is the stomach items by fish preference or availability.

1. Freshwater shrimp	11 of 15
2. Caddis fly larvae	5 of 15
3. Tipulidas	2 of 15
4. Water beetles	1 of 15
5. Diptera	2 of 15
6. Hemlock needles	1 of 15

All fish but one were in excellent physical condition with layers of fat lining the body cavity.

cc: Bob Armstrong